

Appl. No. : 10/070,938
Filed : June 4, 2002

AMENDMENTS TO THE CLAIMS

1-6. (Cancelled)

7. (Currently amended) A method for regenerating cardiovascular tissue comprising:

seeding cells on the a matrix of Claim 1 comprising a sponge configured to regenerate cardiovascular tissue and made of a bioabsorbable material and a reinforcement made of a bioabsorbable material; and

culturing the cells until the matrix surface is completely covered with the cells; and

embedding the matrix in vivo for regenerating cardiovascular tissue.

8. (Original) The method for regenerating cardiovascular tissue according to Claim 7, wherein the cardiovascular tissue to be regenerated is a blood vessel.

9. (Original) The method for regenerating cardiovascular tissue according to Claim 7, wherein the cardiovascular tissue to be regenerated is a cardiac valve.

10. (Original) The method for regenerating cardiovascular tissue according to Claim 7, wherein the cardiovascular tissue to be regenerated is a pericardium.

11. (Original) The method for regenerating cardiovascular tissue according to Claim 7, wherein the cells to be seeded are a mixed cell culture of two or three different kinds selected from the group consisting of endothelial cells, smooth muscle cells and fibroblasts.

12-14. (Cancelled)

15. (New) The method for regenerating cardiovascular tissue according to Claim 7, wherein the bioabsorbable material is at least one member selected from the group consisting of polyglycolic acid, polylactic acid (D form, L form, or DL form), polycaprolactone, glycolic acid-lactic acid (D form, L form, DL form) copolymers, glycolic acid-caprolactone copolymers, lactic acid (D form, L form, DL form)-caprolactone copolymers and poly(p-dioxanone).

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16. (New) The method for regenerating cardiovascular tissue according to Claim 7 for use in regenerating an artery, wherein the sponge comprises a lactic acid-caprolactone copolymer and the reinforcement comprises polylactic acid.
17. (New) The method for regenerating cardiovascular tissue according to Claim 7 for use in regenerating a vein, wherein the sponge comprises a lactic acid-caprolactone copolymer and the reinforcement comprises polyglycolic acid.
18. (New) The method for regenerating cardiovascular tissue according to Claim 7 for use in regenerating a cardiac valve or a pericardium, wherein the sponge comprises a lactic acid-caprolactone copolymer and the reinforcement comprises polylactic acid.
19. (New) The method for regenerating cardiovascular tissue according to Claim 7, wherein the sponge has a pore diameter of about 5 μm to about 100 μm .